

## Adaptive Forward Error Correction for Energy Efficient Optical Transport Networks - DTU Orbit (09/11/2017)

### Adaptive Forward Error Correction for Energy Efficient Optical Transport Networks

In this paper we propose a novel scheme for on the fly code rate adjustment for forward error correcting (FEC) codes on optical links. The proposed scheme makes it possible to adjust the code rate independently for each optical frame. This allows for seamless rate adaption based on the link state of the optical light path and the required amount of throughput going towards the destination node. The result is a dynamic FEC, which can be used to optimize the connections for throughput and/or energy efficiency, depending on the current demand.

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